# SANTA CRUZ BIOTECHNOLOGY, INC.

# SOCS-5 (M-19): sc-8287



The Power to Question

## BACKGROUND

The SOCS (suppressor of cytokine signaling) gene family consists of a group of proteins that negatively regulate cytokine signal transduction. The SOCS family proteins contain a central SH2 domain and a carboxy-terminal region termed the "SOCS box." The SOCS-1 (also called SSI-1 and JAB), SOCS-2 (also called SSI-2 and CIS2) and SOC-3 (also called SSI-3 and CIS3) genes are known to be upregulated by IL-6 and other cytokines. SOCS-4, SOCS-5, SOCS-6 and SOCS-7 were identified by their sequence homology with the SOCS box. CIS (for cytokine-inducible SH2-containing protein) is also a member of the SOCS family.

### REFERENCES

- Yoshimura, A., Ohkubo, T., Kiguchi, T., Jenkins, N.A., Gilbert, D.J., Copeland, N.G., Hara, T. and Miyajima, A. 1995. A novel cytokine-inducible gene CIS encodes an SH2-containing protein that binds to tyrosine-phosphorylated interleukin 3 and erythropoietin receptors. EMBO J. 14: 2816-2826.
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- Nicholson, S.E. and Hilton, D.J. 1998. The SOCS proteins: a new family of negative regulators of signal transduction. J. Leukoc. Biol. 63: 665-668.
- Hilton, D.J., Richardson, R.T., Alexander, W.S., Viney, E.M., Willson, T.A., Sprigg, N.S., Starr, R., Nicholson, S.E., Metcalf, D. and Nicola, N.A. 1998. Twenty proteins containing a C-terminal SOCS box form five structural classes. Proc. Natl. Acad. Sci. USA 95: 114-119.

#### CHROMOSOMAL LOCATION

Genetic locus: SOCS5 (human) mapping to 2p21; Socs5 (mouse) mapping to 17 E4.

#### SOURCE

SOCS-5 (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SOCS-5 of mouse origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8287 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### APPLICATIONS

SOCS-5 (M-19) is recommended for detection of SOCS-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation  $[1-2 \ \mu g \ per \ 100-500 \ \mu g \ of \ total \ protein (1 \ ml \ of \ cell \ lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).$ 

SOCS-5 (M-19) is also recommended for detection of SOCS-5 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SOCS-5 siRNA (h): sc-41002, SOCS-5 siRNA (m): sc-41003, SOCS-5 shRNA Plasmid (h): sc-41002-SH, SOCS-5 shRNA Plasmid (m): sc-41003-SH, SOCS-5 shRNA (h) Lentiviral Particles: sc-41002-V and SOCS-5 shRNA (m) Lentiviral Particles: sc-41003-V.

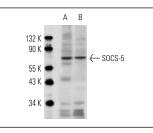
Molecular Weight of SOCS-5: 69 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, mouse spleen extract: sc-2391 or Jurkat whole cell lysate: sc-2204.

# **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# DATA



SOCS-5 (M-19): sc-8287. Western blot analysis of SOCS-5 expression in rat spleen (A) and mouse spleen (B) tissue extracts.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

# PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.